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10/553,344	03/12/2007	Seiji Satoh	S1459.70171US00	2097

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EXAMINER	
MA, TIZE	

ART UNIT	PAPER NUMBER
2628	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,344	SATOH ET AL.	
	Examiner	Art Unit	
	TIZE MA	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/17/2005, 4/12/2007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

2DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 16-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawai (US. Pub. 2002/0030675 A1).

3. Regarding claim 1, Kawai teaches a stereoscopic-vision image processing apparatus for generating a stereoscopic-vision image by composing a plurality of viewpoint images having a parallax with respect to each other, wherein the plurality of viewpoint images having the different viewpoints is managed together with assumed display information about an assumed display unit on which the composed stereoscopic-vision image is desired to be displayed (paragraph [0025], apparatus for generating stereoscopic-vision image; paragraph [0068], composing left and right viewpoint images from two virtual cameras; paragraphs [0058] and [0059], Fig. 4, display device information).

4. Regarding claim 2, Kawai teaches wherein the assumed display information contains information about a type and/or a display size of the assumed display unit (paragraph [0059], Fig. 4, the display device information contains device type and screen size).

5. Regarding claim 3, Kawai teaches wherein in the assumed display information, assumed display size information for displaying the stereoscopic-vision image in an assumed display size thereof is contained (paragraph [0059], Fig. 4, the display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images).

6. Regarding claim 4, Kawai teaches wherein in the assumed display information, assumed display size information for displaying the stereoscopic-vision image in an assumed display size thereof is contained (paragraph [0059], Fig. 4, the display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images.).

7. Regarding claim 5, Kawai teaches wherein a display size of the stereoscopic-vision image is controlled based on at least the assumed display information (paragraph [0059], Fig. 4, paragraph [0064], generating image generation information on the basis of the display device information).

8. Regarding claim 6, Kawai teaches wherein the assumed display information is the assumed display size information (paragraph [0059], Fig. 4, paragraph [0064], generating image generation information on the basis of the display device information. The size information is part of the display device information).

9. Regarding claim 16, Kawai teaches wherein the stereoscopic-vision image is composed of a right-viewpoint image and a left-viewpoint image having a parallax with respect to each other (paragraph [0068], composing left and right viewpoint images from two virtual cameras. Also, Figs. 18A-E).

10. Regarding claim 17, Kawai teaches wherein the right-viewpoint image and the left-viewpoint image are managed as one combined image and the assumed display information is managed as tag information of the combined image (paragraph [0081], combining two images; paragraph [0077], adding display device information during the process).

11. Regarding claim 18, Kawai teaches a stereoscopic-vision image providing method for providing data of a stereoscopic-vision image which is generated by composing a plurality of viewpoint images having a parallax with respect to each other, wherein accessory information that is managed together with data of the plurality of viewpoint images having different viewpoints and relates to an assumed display unit on which the stereoscopic-vision image is desired to be displayed is provided together with the data of the plurality of viewpoint images (paragraph [0025], generating stereoscopic-vision image; paragraph [0068], composing left and right viewpoint images from two virtual cameras; paragraphs [0058] and [0059], Fig. 4, display device information).

12. Regarding claim 19, Kawai teaches wherein the accessory information is assumed display information (paragraph [0059], Fig. 4, display device information).

13. Regarding claim 20, Kawai teaches wherein the assumed display information contains information about a type and/or a display size of the assumed display unit (paragraph [0059], Fig. 4, the display device information contains device type and screen size).

14. Regarding claim 21, Kawai teaches wherein in the assumed display information, assumed display size information for displaying the stereoscopic-vision image in an assumed display size thereof is contained (paragraph [0059], Fig. 4, the display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images).

15. Regarding claim 22, Kawai teaches wherein in the assumed display information, assumed display size information for displaying the stereoscopic-vision image in an assumed display size thereof is contained (paragraph [0059], Fig. 4, the display device information contains screen size, e.g., diagonal length in inches. The size information is used for displaying the stereoscopic-vision images).

16. Regarding claim 23, Kawai teaches wherein a display size of the stereoscopic-vision image to be displayed on a display screen on which the stereoscopic-vision image is displayed is controlled based on at least the assumed display information (paragraph [0059], Fig. 4, paragraph [0064], generating image generation information on the basis of the display device information).

17. Regarding claim 24, Kawai teaches wherein the assumed display information is the assumed display size information (paragraph [0059], Fig. 4, paragraph [0064], generating image generation information on the basis of the display device information. The size information is part of the display device information).

18. Regarding claim 25, Kawai teaches wherein the stereoscopic-vision image is composed of a right-viewpoint image and a left-viewpoint image having a parallax with

respect to each other (paragraph [0068], composing left and right viewpoint images from two virtual cameras. Also, Figs. 18A-E).

19. Regarding claim 26, Kawai teaches wherein the right-viewpoint image and the left-viewpoint image are managed as one combined image and the assumed display information is managed as tag information of the combined image (paragraph [0081], combining two images; paragraph [0077], adding display device information during the process).

20. Regarding claim 27, Kawai teaches an image display method for generating a stereoscopic-vision image by composing a plurality of viewpoint images at least having a parallax with respect to each other, and displaying the stereoscopic-vision image, wherein stereoscopic-vision images having almost a same display size are displayed on at least two displays (paragraph [0025], generating stereoscopic-vision image; paragraph [0068], composing left and right viewpoint images from two virtual cameras; paragraphs [0058] and [0059], Fig. 4, display device information. HMD has two displays).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

23. Claims 7-15, 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai as applied to claims 1 and 27 above, and in view of Veditz et al (US. Pub. 2002/0177993 A1).

24. Regarding claim 7, Kawai remains as applied to claim 1 above. Kawai also teaches validating the 3D data and performing error handling if necessary (paragraph [0078]). However, Kawai does not explicitly teach wherein when a display size of the stereoscopic-vision image is changed, a screen for informing the change in display size is displayed.

25. Veditz et al teaches an error handling routine in the event of incompatibilities. It includes facilities for warning users of incompatible or otherwise illegal operations (paragraph [0015]). The warning is implemented as a warning dialog box with informative messages (Figs. 4A-C). Sending user a warning or informing message is a conventional method of an error handling in the art of computer programming.

26. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device as shown in Kawai by sending warning/informing message to the user as shown in Veditz et al when the display size is changed, as the

method of error handling after the data validation, since sending user a warning or informing message is a conventional method of an error handling in the art of computer programming.

27. Claims 8-15 are all directed to displaying a warning dialog box based on the display size. The combination of Kawai and Veditz et al which is applied to claim 7 above may also be applied to claims 8-15. That is, a warning dialog box with informative messages is displayed when incompatibilities occur as a method of error handling. Therefore Claims 8-15 are rejected based on the same rationale as claim 7.

28. Regarding claim 28, Kawai remains as applied to claim 27 above. Kawai also teaches validating the 3D data and performing error handling if necessary (paragraph [0078]). However, Kawai does not explicitly teach wherein when a display size of the stereoscopic-vision image is changed, the change in display size is informed.

29. Veditz et al teaches an error handling routine in the event of incompatibilities. It includes facilities for warning users of incompatible or otherwise illegal operations (paragraph [0015]). The warning is implemented as a warning dialog box with informative messages (Figs. 4A-C). Sending user a warning or informing message is a conventional method of an error handling in the art of computer programming.

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method as shown in Kawai by sending warning/informing message to the user as shown in Veditz et al when the display size is changed, as the method of error handling after the data validation, since sending user a warning or

informing message is a conventional method of an error handling in the art of computer programming.

31. Claim 29 is directed to displaying a warning dialog box based on the display size change. The combination of Kawai and Veditz et al which is applied to claim 28 above may also be applied to claim 29. That is, a warning dialog box with informative messages is displayed when incompatibilities occur as a method of error handling. Therefore Claim 29 is rejected based on the same rationale as claim 28.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishihara et al (US. Pub. 20050078370 A1, for a multi-view stereoscopic image display apparatus)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIZE MA whose telephone number is (571)270-3709. The examiner can normally be reached on Mon-Fri 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao M. Wu can be reached on 571-272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kee M Tung/
Supervisory Patent Examiner, Art Unit 2628

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